IN THE CLAIMS:

1. A method of eliminating pathogenic organisms in raw shellfish, comprising:

exposing raw shellfish to hydrostatic pressure at ambient temperature for a period of time sufficient to cause destruction of the pathogenic organisms without substantially affecting sensory characteristics of said raw shellfish.

2. The method of claim 1, wherein said raw shellfish is exposed to hydrostatic pressure of between about 20,000 p.s.i. to about 50,000 p.s.i. for 1-15 minutes.

3. A process of destroying bacteria in raw molluscan shellfish, comprising the steps of:

providing a pressure vessel;

depositing said shellfish into said pressure vessel;

loading a pressure transmitting liquid into said pressure vessel;

pressurizing said pressure vessel to between about 20,000 p.s.i. and 50,000 p.s.i., thereby causing destruction of said bacteria, while retaining sensory characteristics of said shellfish.

4. The process of Claim 3, wherein said raw shellfish is exposed to isostatic pressure for 1-15 minutes.

5. A raw shellfish treated in accordance with the process of Claim 3.

6. A process of treating raw molluscan shellfish, which comprises:

exposing said shellfish to a hydrostatic pressure of between 20,000 p.s.i. to 50,000 p.s.i. for 1-15 minutes at ambient temperature, thereby destroying pathogenic

organisms in said raw shellfish.

7. The process of Claim 6, wherein said shellfish is enclosed in liquid-impermeable bags filled with pressurizable liquid prior to exposing said shellfish to hydrostatic pressure.

8. A method of shucking a raw oyster, comprising the steps of:

exposing said oyster to hydrostatic pressure sufficient to cause detachment of an adductor muscle from a shell of said oyster and opening of the oyster shell.

9. The method of Claim 8, wherein said oyster is exposed to hydrostatic pressure of at least 20,000 p.s.i. for 15 minutes.

10. The process of Claim 8, wherein a flexible detachable band is wrapped around said oyster shell prior to exposing said oyster to hydrostatic pressure.

11. A process of shucking oysters, comprising the steps of:

wrapping a flexible detachable band around individual oysters;

positioning said oysters in a pressure vessel;

applying hydrostatic pressure to said oysters in the pressure vessel for a time sufficient to cause detachment of an adductor muscle from shells of said oysters;

removing said bands from said oysters and opening said oysters without cutting said adductor muscles.

12. The process of Claim 11, wherein said oysters are exposed to hydrostatic pressure of at least 20,000 p.s.i. for a period of about 15 minutes.

13. The process of Claim 11, wherein said oysters are positioned in flexible liquid-

impermeable bags filled with pressurizable liquid prior to exposing said oysters to hydrostatic pressure.

14. An apparatus for processing raw food products, comprising:

a pressure vessel having a bottom plate, vertically extending side walls and a detachable lid;

a liner positioned inside said pressure vessel, said liner defining a pressure chamber for receiving said raw food products, said pressure chamber being adapted for pressurization by an external source of pressure;

retaining members positioned in said pressure vessel around said liner, said retaining members being formed from a high-tensile steel;

a pressure-holding and safety yoke being adapted for positioning around said pressure vessel when said pressure chamber is pressurized.

15. The apparatus of Claim 14, wherein said retaining member is comprised of a plurality of high-tensile steel slabs sized and shaped to conform to exterior walls of said liner.

16. The apparatus of Claim 14, further comprising a means for mounting said vessel on a vertical surface in an elevated position relative to a horizontal surface.

17. The apparatus of Claim 16, further comprising a safety plate secured on a side wall of said pressure vessel opposite said mounting means.

18. The apparatus of Claim 16, wherein said mounting means comprises a plurality of brackets fixedly attached to the exterior wall of said pressure vessel.

19. The apparatus of Claim 14, wherein said yoke is mounted on wheels to facilitate movement of said yoke in relation to said pressure vessel.

20. The apparatus of Claim 19, further comprising a means for aligning said yoke when said yoke moves in relation to said pressure vessel.

21. The apparatus of Claim 20, wherein said aligning means comprises a pair of rail guides, and wherein said wheels engage in said rail guides.

22. The apparatus of Claim 14, wherein said yoke is sized and shaped to cover said bottom, said top and at least a part of said side wall of said pressure vessel.

23. An apparatus for processing raw shellfish to eliminate bacteria in said raw shellfish, said apparatus comprising:

a first pressure vessel, a second pressure vessel, said pressure vessels being adapted to receive said raw shellfish therein, each of said pressure vessels comprising a pressure chamber for receiving a pressure transmitting liquid therein and for creating a pressure of between 20,000 p.s.i. and 80,000 p.s.i.;

a pressure holding and safety yoke movable between said first pressure vessel and said second pressure vessel for selectively holding pressure and protecting said first pressure vessel and said second pressure vessel, when said raw shellfish is loaded in any of said pressure for pressure processing, said yoke holding lids of said pressure vessels during a pressure-application cycle.

24. The apparatus of Claim 23, wherein each of said pressure vessels comprises a liner for defining a pressure chamber and retaining members mounted in said pressure

vessel around said liner.

25. The apparatus of Claim 24, wherein said retaining members are formed from high tensile steel slabs.

26. The apparatus of Claim 24, wherein said retaining members comprise a plurality of high tensile steel slabs secured together to conform to the size and shape of an interior wall of said pressure vessel and an exterior wall of said liner.